Division of Solid and Hazardous Waste P.O. Box 414 Trenton, New Jersey 08625-0414 Tel. # (609) 984-6900 Fax. # (609) 984-6874

SOLID WASTE FACILITY PERMIT

Under the provisions of N.J.S.A. 13:1E-1 <u>et seq.</u> known as the Solid Waste Management Act, this solid waste facility permit is hereby issued to:

VALERO REFINING COMPANY

FACILITY TYPE:

Class II Sanitary Landfill

PACILITY NUMBER:

0807000370

LOT NO.:

1

BLOCK NO.

25

MUNICIPALITY:

Greenwich Township

COUNTY: <u>Gloucester</u>

EXPIRATION DATE: March 25, 2004

This Permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection as same may be amended in the future. Any references herein to specific regulations include any future amendments thereto.

This Permit shall not prejudice any claim the state may have to riparian land, nor does it allow the Permittee to fill or alter or allow to be filled or altered in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this state without prior acquisition of the necessary grants, permits or approvals from the Department of Environmental Protection.

Compliance with the terms of this Permit does not relieve the Applicant of the obligation to comply with all applicable state and federal statutes, rules and other permits.

Failure to comply with all of the conditions specified herein may result in revocation of this Permit and/or other regulatory or legal actions which the Department is authorized to institute by law.

This Permit is non-transferable without approval from the Department pursuant to N.J.A.C. 7:26-2.7(e).

March 25, 1999 Date Signed by John A. Castner, P.E., P.P., Assistant Director
John A. Castner, P.E., P.P.
Assistant Director
Office of Permitting & Technical
Programs

Solid Waste Facility Permit for the Valero Refining Company Refinery Sanitary Landfill, Facility Number 0807000370

The Valero Refinery Landfill (landfill or facility) is located within the confines of the Valero Refinery property in Gloucester County, New Jersey. The Refinery lies within the Town of Gibbstown and Greenwich Township. The facility is located in the northwest corner of the Refinery site and occupies approximately ten (10) acres. The primary purpose of the landfill is to provide a contingency option for disposal of the spent catalyst material collected from the electrostatic precipitators during the oil refining process. The material consists solely of Fluid Catalyst Cracker (FCC) fines. It is inert and non-putresible. The nature of this material makes it an ideal constituent of cement. As such, the FCC fines are routinely sold to a cement manufacturer. The landfill operates on an as-needed basis when unforeseen circumstances prevent the transport/sale of the entire quantity of material. This can occur during periods when unusually large amounts of the material are produced; foul weather; process machinery downtime, etc.

This Permit is contingent upon compliance with and implementation of the following:

A. **GENERAL CONDITIONS**

1. Permitted Waste Types

The following solid waste materials, as identified by waste I.D. numbers and defined in N.J.A.C. 7:26-2.13(g), may be accepted for disposal at the landfill:

<u>I.D.</u>	<u>Waste</u>

13C Construction and Demolition Debris

27 Dry industrial waste – limited to Fluid Catalyst Cracker

fines

2. Prohibited Waste Types

The following solid waste materials, as identified by waste I.D. numbers and defined in N.J.A.C. 7:26-2.13(g) and (h) may not be accepted for disposal at the landfill:

I.D.	Waste
<u>I.D.</u> 10	Municipal Waste (household, commercial and institutional)
12	Dry sewage sludge
13	Bulky waste
23	Vegetative waste except leaves pursuant to N.J.S.A. 13:1E-99.21
25	Animal and food processing waste
27	Dry Industrial Waste except as listed above
27A	Waste material consisting of asbestos or asbestos containing waste
271	Waste material consisting of incinerator ash or ash containing waste
72	Bulk liquid and semi-liquids
73	Septic tank clean-out wastes
74	Liquid sewage sludge

Regulated Medical Waste Class 1 through 7 as per N.J.A.C. 7:26-3A.5

<u>Hazardous Waste</u> as defined identified or otherwise classified in N.J.A.C. 7:26G-5. <u>Recyclable Materials</u> as designated in the Gloucester County District Recycling Plan.

3. Noise Control

Noise control shall be implemented so that noise levels generated by the landfill operation shall not exceed the standards set forth by the New Jersey Noise Control Regulations at N.J.A.C. 7:29-1.2.

4. Fire Safety

An adequate water supply and/or fire fighting equipment shall be readily available onsite or on-call to extinguish any and all fires. In case of a fire, the Permittee shall immediately notify the local police and fire department having jurisdiction and the NJDEP action line at (609) 292-7172. The Permittee shall be responsible for initiating and continuing firefighting actions until all smoldering, smoking and burning ceases. The Permittee shall seek and obtain fire-fighting assistance if smoldering, smoking or burning persists for longer than 24 hours. The Permittee shall ensure that local fire companies are thoroughly versed in the emergency plan of action for a fire at the facility. Specific procedures shall be outlined in the final Operations and Maintenance Manual for the landfill.

5. Security and Facility Access Control

The entire refinery property is fenced and access to the site is limited to facility personnel and authorized visitors. All refinery entrances are guarded by the on-site security force and further secured by security card-activated gates. The landfill is located in the northwest corner of the refinery property and does not have separate access control features.

All existing fences, gates and access roads shall be maintained in accordance with the Operations and Maintenance Manual.

6. Hours of Operation

Facility usage and hours of operation are dependent upon refinery operations. The landfill is utilized on a contingency basis; thus, actual hours of operation vary as necessary to accommodate the requirements of the refinery.

7. <u>Safety Procedures</u>

A copy of the operating safety procedures shall be maintained at the Environmental and Safety Affairs Department (ESA Dept.). The Permittee shall follow the Occupational Safety and Health Administration (OSHA) standards in the construction and operation of this facility for the safety of contractors, employees and other persons entering the premises.

8. Housekeeping

Routine housekeeping and maintenance procedures shall be implemented within the facility interior to prevent the accumulation of debris and excessive dust on the interior refinery roads and to maintain general cleanliness in the working environment.

Dust control at the landfill shall be affected by the spraying of water or the spreading of calcium chloride or an equivalent method approved by the Division as needed. Spraying of waste oil is prohibited.

9. Facility Personnel Training

All personnel who are directly involved in facility waste management activities or who operate, service or monitor any facility equipment, machinery or system shall successfully complete an initial program of classroom or on-the-job training which includes instruction in the operations and maintenance of equipment, machinery and systems and which teaches them to perform their duties in a manner that ensures the facility's compliance with the requirements of N.J.A.C. 7:26 and the conditions of all Department permits issued to the facility.

The training program shall ensure that appropriate facility personnel are able to effectively respond to any equipment malfunction or emergency situation that may arise. The training program shall provide instruction in the use of safety equipment, procedures for inspecting and repairing facility equipment, machinery and monitoring systems and the procedures to be followed during planned or unplanned shutdown of operations.

The program shall require training in the constant monitoring of incoming loads and shall include instruction in the identification and proper handling of suspected unauthorized waste types. Instruction in fire training and noise awareness shall be provided to appropriate personnel.

10. <u>Facility Staffing</u>

Sufficient staff to ensure proper, orderly and safe operation of all materials handling, processing, monitoring and control, safety, emergency and security equipment items shall be maintained for the facility. Concurrently, the level of staffing shall provide the capability to handle all routine facility maintenance requirements and also to respond to all emergency situations.

A fully trained and qualified foreman or supervisor who is designated and authorized by the Permittee to direct and implement all operational decisions shall be present at the facility at all times when landfilling activities are occurring.

11. <u>Emergency Actions</u>

In the event of an emergency, all measures outlined in N.J.A.C. 7:26-2A.8(b) 42 shall be followed. The Department shall be notified immediately at (609) 292-7172. Emergency measures shall also be listed in the approved Operations & Maintenance Manual for this facility.

12. Plans On-Site

Copies of the approved Closure and Post-Closure Plan, the final Operations and Maintenance Manual, the operations record and this Permit shall be kept at the ESA Dept. and shall be made available for inspection by Department personnel or its designated representatives.

13. Duration of Permit

This Permit shall be effective for a maximum period of five (5) years from the date of its issuance. This Permit may be renewed at that time upon the proper application, in accordance with the procedures outlined in N.J.A.C. 7:26-2.7(b).

14. Right of Entry

The Permittee, by acceptance of this permit, hereby authorizes entry by Department representatives to make whatever inspections, searches, or examinations are deemed necessary by those representatives to determine the extent of compliance with any conditions of this Permit.

15. Operations Record

The Permittee shall maintain records of the facility's waste disposal for all days on which landfill activities occur. Monthly summaries shall be submitted, before the 20th of each month following the month for which the information was recorded, to:

New Jersey Department of Environmental Protection
Division of Solid and Hazardous Waste
Bureau of Recycling and Planning
P.O.Box 414
Trenton, New Jersey 08625-0414

B. SANITARY LANDFILL DESIGN AND CONSTRUCTION

1. Final Cover

Final cover shall consist of an impermeable cap comprised of the following layers (in descending order):

- Six (6) inches of topsoil capable of supporting vegetative growth
- 24-inches of earthen material
- Twelve (12) inches of clay with a maximum permeability of 1 x 10⁻⁷ cm/sec

Final cover vegetation shall be installed and maintained in accordance with the certified Soil Erosion and Sediment Control Plan. Final cover shall be applied within six (6) months to any area where final elevations have been achieved.

2. Ground and Surface Water Monitoring

The location, sampling and analysis of all ground water monitoring wells shall be in accordance with the approved New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Ground Water (DGW) permit, NJPDES – DGW NJ0085502, issued to the Valero Refining Company for the landfill.

Storm water monitoring at the landfill shall be in accordance with the approved NJPDES Discharge to Surface Water (DSW) Permit, NJPDES – DSW NJ0005029, issued to the Valero Refining Company.

3. On-Site Baseline

In accordance with N.J.A.C. 7:26-2A.7(a) 2, the on-site baseline consisting of two vertical and horizontal control monuments shall be maintained.

4. Landfill Service Capacity

The active fill area of this landfill is approximately 10 acres. Disposal of waste is limited to this area. Final elevations, including final cover, shall not exceed 35 feet above mean sea level. All side slopes shall be constructed as specified in the Closure and Post-Closure Plan for the landfill.

5. Soil Erosion and Sediment Control

The Permittee shall comply with all requirements of the Soil Erosion and Sediment Control Plan as certified by the Gloucester Soil Conservation District. All soil and sediment control practices shall be installed and maintained in accordance with said Plan.

6. <u>Documents of Record</u>

The construction and operation of this facility shall be in accordance with the provisions of N.J.A.C. 7:26-1 et seq., and the following reports and plans. In case of conflict, the most recent revisions and supplemental information approved by the Department shall prevail over prior submittals, and the later submissions shall supersede the earlier engineering designs.

- a) Amended Sanitary Landfill Closure Report, dated November 18, 1991
- b) Sanitary Landfill Closure Report, dated April 10, 1996

C. OPERATIONS, MAINTENANCE AND MONITORING

1. Inspection, Operation and Maintenance Schedules

The following shall be performed on a daily basis:

Record precipitation

The following shall be performed on a weekly basis:

- Inspect all environmental control systems
- Inspect ground water monitoring wells for damage

The following shall be performed after storm events:

- Inspect all environmental control systems
- Inspect stormwater detention basins and surface runoff structures

The following shall be performed on an annual basis:

- Perform topographic survey of landfill
- Inspect emergency equipment

The following shall be performed biennially:

- Survey the baseline vertical and horizontal control monuments

Monitoring of groundwater and stormwater discharges shall be performed in accordance with the NJPDES regulations, N.J.A.C. 7:14A et seq and the conditions of the approved NJPDES DGW and DSW permits, respectively, as issued to the Valero

Refining Company – New Jersey.

Inspection, operation and maintenance of other aspects of the facility shall be performed, as necessary, in order to meet the terms of this Permit and all applicable regulations.

The Permittee shall record the results of the inspections in a logbook, which shall be maintained at the ESA Dept. and be available at all times, for inspection by the Department. These records shall include the date and time of the inspection, the name of the inspector, a notation of observations and recommendations, and the date and nature of any repairs or other remedial action.

2. Final Operations and Maintenance Manual

The Operations & Maintenance (O & M) manual shall be submitted to the Department for review within ninety (90) days of the issuance of this permit. Any necessary changes shall be incorporated into the final O & M manual that shall be submitted for Department review and approval. The approved final O & M manual shall be maintained at the ESA Dept. Any changes to the approved final O & M manual shall be submitted to the Department for review. These proposed changes shall not be implemented at the facility until the Department approves the modifications.

3. Waste Disposal Methods

The working face shall be confined to the smallest practical area, as is consistent with the proper operation of trucks and equipment, in order that the area of waste material exposed during the operating day is minimized. The maximum working face width shall not exceed 150 feet. At no time shall the area of exposed waste be greater than 15,000 square feet. The lift height of a daily cell shall not exceed 12 feet. Waste shall be compacted in two (2) foot layers. The maximum working face slope shall not exceed 3:1 (horizontal to vertical).

4. <u>Cover Requirements</u>

Daily and intermediate cover shall be of the types that can be workable under all weather conditions. A sufficient quantity of cover material shall be available at all times to ensure proper operation of the landfill. At the end of each day on which landfilling activities have occurred, daily cover shall be placed on areas of the solid waste workface that will be exposed for less than 24 hours. Daily cover shall consist of at least six (6) inches of soil or alternate cover material as approved by the Department. Intermediate cover, which shall consist of at least 12 inches of soil or alternate cover material as approved by the Department, shall be applied to all surfaces exposed for any period exceeding 24 hours.

5. Surface Water Control

The grade and thickness of cover material on all surfaces of the facility shall be maintained regularly so as to prevent the occurrence of ponding of water anywhere on the active landfill area except in designated stormwater control ponds. All provisions of the drainage plans as shown on the approved Closure/Post-Closure Plan shall be implemented. The channels and drainage structures shall be regularly maintained. Any drainage of run-off from the active landfill area shall be directed to the stormwater collection system.

6. Methane Gas Monitoring

Within 90 days of issuance of this solid waste facility permit, Valero shall perform a methane gas survey to determine the presence or absence of gas at the landfill. Should more than a nominal amount of landfill gas be detected, Valero shall submit a plan for ongoing monitoring to the Department for its review.

7. Closure and Post-Closure Plan

The Permittee shall comply with the requirements of N.J.A.C. 7:26-2A.9 for the closure and post-closure care of this facility. Failure to comply with the requirements of any closure plan approval issued by the Department may result in the revocation of this permit.

8. Summary of Required Submittals

The following information shall be submitted to the Bureau of Landfill and Recycling Management, Division of Solid and Hazardous Waste, of this Department:

	<u>Document</u>	<u>Due Date</u>
a.)	Annual Topographic Survey and report	Prior to May 1 in accordance with 7:26 2A.8(i)
b.)	Closure & Financial Plan two-year update	biennially
c.)	Methane Gas Survey	within 90 days of permit issuance

Failure to comply with any or all limitations heretofore mentioned will result in the Department seeking relief under N.J.S.A. 13:1E-1 et seq., the Solid Waste Management Act. Specifically, failure to do so may result in loss of operating authority pursuant to N.J.S.A. 13:1E-12. This Permit is contingent upon compliance with all local, state and federal laws and regulations.